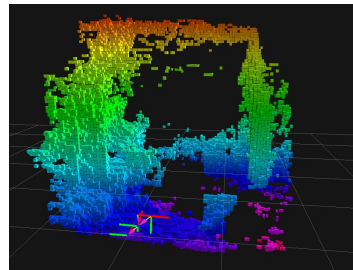
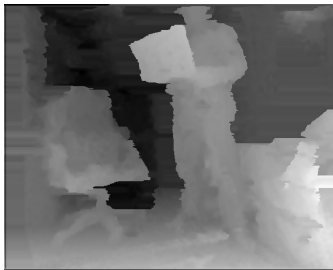




Project Artemis - Visual Navigation for Drones

Mohammed Kabir

What is demonstrated



What was improved

- Completely GPS-denied navigation.
- Tight time-synchronised multi-sensor fusion.
- Realtime onboard mapping.
- Continuous onboard trajectory planning.
- Dense 3D mesh reconstruction (in realtime) on the ground control station.
- Modular system, generalises to any multicopter platform.
- Operator assist mode enables sense-and-avoid while remaining in control of vehicle.
- Fully autonomous exploration with optimal trajectory planning.

Hardware Information

- 4 machine vision cameras
- Intel Core i7 computer
- Pixhawk autopilot

Source code or detail technical information availability

www.uasys.io/research

www.github.com/ProjectArtemis